

MASTER PLUMBER

PURPOSE: To properly plan, lay out, and supervise the installation and repair of apparatus and equipment for plumbing, heating, and irrigation systems.

FUNCTIONAL AREAS:

1. Perform skilled plumbing work in the installation, maintenance, and repair of plumbing, heating, and irrigation systems.
 - * A. Install, maintain, and make repairs to plumbing, heating, water, and sewer systems in City structures; and assume accountability for conformance with minimum code standards.
 - * B. Install, maintain, and make repairs to all plumbing and related appurtenances.
 - * C. Install wash basins, urinals, toilet bowls, and toilet tanks.
 - * D. Perform all types of piping joints and hanger welding.
 - * E. Install and make repairs to lawn sprinkler systems.
 - * F. Determine modifications required when obstructions are met while installing plumbing/heating systems.
 - * G. Maintain and make repairs to ventilation systems.
 - * H. Ensure a safe work environment.
 - * I. Prepare seasonal plumbing systems by winterizing as required.
 - * J. Operate power hand tools and motorized equipment.
 - * K. Attend related training sessions.
 - * L. Assist other tradespersons as necessary.
2. Organize and direct activities of assigned personnel.
 - * A. Review and interpret blueprints, develop materials lists, and determine costs.
 - * B. Estimate time and materials necessary to perform a job.
 - * C. Assist with inspections of new installations and/or modifications performed by others.
 - * D. Obtain plumbing permits for the City of Duluth when required.
 - * E. Secure meter applications when required.
 - * F. Direct and check the work of journeypersons and helpers as assigned.

JOB REQUIREMENTS

1. LICENSE:

- * A. Possession of a State of Minnesota Master Plumber license.
- * B. Possession of a Minnesota 1st Class Engineer license.
- * C. Possession of a Minnesota Class "B" driver's license or privilege.

2. EXPERIENCE:

- * Two (2) years of verifiable experience as a licensed Master Plumber or equivalent.

3. KNOWLEDGE:

- * A. Knowledge of Minnesota plumbing codes.

- B. Knowledge of all other laws and rules regulating sanitary plumbing practices.
- * C. Knowledge of the tools, equipment, and materials used in the plumbing trade.
- D. Knowledge of hydraulics as related to flow rates, pipe sizes, and water pressure.
- * E. Knowledge of wiring involved with heating and cooling controls.
- * F. Knowledge of pneumatic controls.
- * G. Knowledge of various types of pumps involved in plumbing, heating, and cooling.
- * H. Knowledge of the methods used in the installation, operation, and maintenance of irrigation systems.
- I. Knowledge of sheet metal and ducting.
- * J. Knowledge of applicable safe work practices and procedures.

4. SKILLS:

- * A. Skill in the operation and maintenance of plumbing systems and fixtures.
- * B. Skill in the operation and maintenance of steam and hot water heating systems.
- * C. Skill in the operation and repair of oil and gas warm air heating systems.
- * D. Skill in the operation and maintenance of aquatic pools, including filtration systems, circulation pumps, injection pumps, and related equipment.
- * E. Skill in the operation and maintenance of decorative fountains.
- * F. Skill in the operation of large compressors (up to 1000 CFM), generators, and power threading equipment.

5. ABILITIES:

- * A. Ability to read and interpret blueprints, diagrams, and manuals.
- * B. Ability to calculate materials costs.
- * C. Ability to estimate time and materials necessary to complete a job.
- * D. Ability to weld/braze.
- * E. Ability to perform mechanical work.
- * F. Ability to understand and follow oral and written instructions.
- * G. Ability to direct helpers.
- * H. Ability to erect ladders and scaffolding in a safe manner.
- * I. Ability to use power hand tools.
- * J. Ability to recognize safety hazards and to take appropriate precautions.
- * K. Ability to establish and maintain effective working relationships with co-workers, subordinates, and the general public.
- * L. Ability to stand, walk, kneel, crouch, stoop, and crawl as needed to perform plumbing activities.
- * M. Ability to lift and transport (usually by carrying) supplies, tools, and equipment such as a power threader weighing 90 pounds.
- * Essential functions or job requirements necessary on the first day of employment.